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ABSTRACT

With the dwindling of the traditional college applicant pool, retention has become one of higher educational institutions' top priorities. This study addresses the effectiveness of Western Psychological Services' "Student Adaptation to College Questionnaire" (SACQ) for providing early evidence of poor adjustment and potential attrition and its ability to differentiate persisters from non-persisters. Using discriminant analysis of the SACQ forms of nearly 2,000 new University of Hartford freshmen and transfer students in fall 1989 and 1990, the study examined: (1) the extent to which the SACQ accurately predicts student departure for a private, comprehensive university; (2) SACQ items distinguishing non-persisters; (3) SACQ use with an incoming class; and (4) evidence linking the SACQ with intervention strategies. Evidence from the study suggested that the SACQ can effectively alert faculty and counselors as to which students are most likely to depart with overall discriminant functions correctly classifying 79 to 85 percent of students as persisters or non-persisters. In addition, the SACQ showed an apparent ability to identify various clusters or subcultures which characterize a campus. Anecdotal evidence following dialogues with high-risk students provided some substantiation for a link between intervention, heightened adjustment, and increased retention. The report contains five tables and nine references. (JB)

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PREDICTING PERSISTENCE FROM THE STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE: EARLY WARNING OR SIREN SONG?

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Jean Endo
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PREDICTING PERSISTENCE FROM THE STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE: EARLY WARNING OR SIREN SONG?

Abstract

With the currently dwindling traditional applicant pool, retention is higher education's holy grail of the nineties. Western Psychological Services is marketing its new Student Adaptation to College Questionnaire (SACQ) as providing early evidence of poor adjustment and potential attrition. While the SACQ closely parallels Tinto's model of institutional departure, no previously published research addresses its ability to differentiate persisters from non-persisters. Using discriminant analysis, the present study examined (1) the extent to which the SACQ accurately predicts student departure for a private, comprehensive university; (2) SACQ items distinguishing non-persisters; (3) use with an incoming class; and (4) evidence linking the SACQ with intervention strategies. The paper will appeal to a wide audience, especially those concerned with enrollment management and assessment.

PREDICTING PERSISTENCE FROM THE STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE: EARLY WARNING OR SIREN SONG?

Introduction

An honors student with 1210 on the SAT and a full scholarship to her state university, Tanya could not envision seeking help as a first semester freshman. However, at the close of that semester she found herself facing four D's and academic probation (Farrish, 1991). As Tanya explained the following February, "I think it's time to grow up again. . .I grew up in the fall, and I was mature. . .and now it's time to take another step forward" (p. B5). Like Tanya, one in five freshmen in her University's College of Liberal Arts and Sciences are placed on academic probation or dismissed after only one semester. Many such academic problems stem from difficulty adjusting to college life -- a life away from parents, filled with new freedom and responsibilities (Farrish, 1991).

While poor academic performance often signals adjustment problems, other symptoms can surface independently. For instance, Boyer (1987) recounts another student's early disillusionment with college life: "This college isn't exactly what I had pictured, so I'm not really happy here. When I go home on weekends I'm not excited to come back. I'm not sure why . . .It seems like a glorified high school that just has a lot harder curriculum" (p. 45).

These are not isolated cases; indeed, a large percentage of new undergraduates "arrive on campus with an idealized view of college life. For whatever reasons, too many students. . .do not make a satisfactory adjustment" or transition (p. 44). Consequently, a substantial and relatively predictable number transfer, stop out, or leave higher education altogether in what Tinto (1987) terms a "massive and continuing exodus" (p. 1). Yet, after the "bump that comes with any major move," an equal number "soon settle in and become

committed members of the college community" (Boyer, 1987, p. 45). What ultimately makes the difference as to whether or not a student will successfully adjust and become committed or attached to college life? And, what factors most influence an individual's decision to persist in an institution of higher learning or, conversely, to depart prior to completing a degree?

As Tinto's (1987) model of institutional departure suggests, academic and social integration are the keys. "Eventual persistence requires that individuals make the transition to college and become incorporated into the ongoing social and intellectual life of the college" (p. 126). Institutions of higher learning, by fostering "the development of locally available social and academic communities, help establish the conditions under which individual social and intellectual integration may take place" (p. 127). Clearly, this two-way process places important expectations on both students and institutions as the former move toward solidifying membership in the new academic and social community (p. 127). To seriously address the challenge of increasing student integration and, thus, retention, colleges and universities must "assess the character of student experiences within the institution. . .[determining] how those experiences are linked to different forms of student progression and departure. More importantly, institutions must be able to reliably discern how their own actions" affect the forms of student departure they seek to remedy" (p. 129). Once the characteristics of those least likely to persist at a particular campus have been identified, specific services (e.g., counseling or special transition programs) can help ease the various difficulties experienced by such high-risk students.

Western Psychological Services markets the recently-released Student Adaptation to College Questionnaire (SACQ) as an early warning measure which can distinguish at-risk students from their more academically or socially integrated

counterparts. Below the eye-catching heading, "How to Keep Students in College," one advertisement describes the SACQ as "particularly useful in identifying potential dropouts" since it assesses overall adjustment to college as well as academic adjustment, social adjustment, personal-emotional adjustment, and attachment to the institution. This instrument is designed to be administered approximately six weeks after students first enter a college or university. "By detecting adjustment problems early," asserts the advertisement, "SACQ can help you retain students who might otherwise drop out."

With 67 items falling into four subscales (Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Attachment to college and the institution) the SACQ closely parallels Tinto's model of institutional departure. Thus it can reasonably be hypothesized that, if Tinto is correct, the instrument also will differentiate persisters from non-persisters. However, despite the correlational tests and other statistical studies reported by the SACQ's authors (Baker and Siryk, 1986; Baker and Siryk, 1989), no published research directly addresses the SACQ's prediction of student departure. One of the few allusions to its predictive value emerges from Baker and Siryk's (1986) finding that the drop-out rate of their less well-adjusted, no-interview sample was nearly three times that of their well-adjusted, no interview sample.

Objectives

The primary aim of this study was to examine the contention that the SACQ can accurately predict potential drop-outs for an institution of higher learning and, by identifying students' areas of low adjustment, suggest strategies to increase retention. Specifically, it analyzed: (1) the extent to which the SACQ accurately predicts student departure for one private, comprehensive university; (2) the unique variables which differentiate persisting from departing students; (3) application of this information to two incoming classes;

and (4) evidence of a clear link between the SACQ and effective intervention strategies.

Related Literature

As the Western Psychological Services advertisement asserts, the Student Adaptation to College Questionnaire (SACQ) is a self-report instrument consisting of 67 statements related to various aspects of the college experience.

> Underlying and shaping the development of the SACQ [was] the assumption that adjustment to college is multifaceted -- that it involves demands varying in kind and degree and requires a variety of coping responses (or adjustments), which vary in effectiveness. Accordingly, each item of the questionnaire alludes to one of the many facets of adjusting to college and, either explicitly or implicitly, to how well the student is coping with that demand. (Baker and Siryk, 1989, p. 1)

Examples of these SACQ items include: "I feel that I fit in well as part of the college environment," "I have been feeling tense or nervous lately," "I am satisfied with the extracurricular activities available," and "I would rather be home than here."

Students respond to these items along a nine-point continuum ranging from "Applies very closely to me" to "Doesn't apply to me at all." A scoring sheet sealed inside the instrument associates these points with the numbers 1 (representing low adjustment, high risk of departure) through 9 (high adjustment, low risk). A score of 5 reflects average adjustment on any item. Accurate interpretation of these scores depends upon the context of each statement. For example, the response "Applies very closely to me" connotes poor

adjustment (a score of 1) on the item "I would rather be home than here" but excellent adjustment (a score of 9) for "I feel that I fit in well. . .."

The 67 items on the questionnaire fall under one of four principal subscales: Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Attachment (to college in general and to the student's institution). Each of these subscales, in turn, consists of at least two components (or item clusters), totalling twelve in all. Academic Adjustment comprises Academic Motivation, Academic Application, Academic Performance, and Academic Environment; Social Adjustment includes General Social, Other People, Nostalgia, and Social Environment; Personal-Emotional Adjustment incorporates the Psychological and Physical areas; and Attachment subsumes General Attachment and Attachment to a specific institution. Scores are calculated for the four principal subscales as well as for their twelve components.

Psychometric properties of the SACQ have been tested through research with current and prior versions of the instrument. The variables it measures "are not expected to be necessarily stable and enduring properties of individuals but states that can vary with changes in the student's environment, life events, and, possibly, personality characteristics. Thus, estimates of internal consistency reliability are more appropriate than test-retest reliability" (Baker and Siryk, 1989, p. 34). Cronbach's alpha coefficients for the full scale as well as the four subscales are reasonably large. Alphas for the Full Scale range from .92 to .95, for the Academic Adjustment subscale from .81 to .90, for the Social Adjustment subscale from .83 to .91, for the Personal-Emotional Adjustment subscale from .77 to .86, and for the Attachment subscale from .85 to .91 (Baker and Siryk, 1989).

Intercorrelations found among the SACQ subscales in various administrations generally range from .40 to .60 while intercorrelations between the subscales and the Full Scale tend to be somewhat higher. Such correlations are

sufficiently large to indicate that the scales measure a common construct (adjustment) but "small enough to support the conceptualization of that construct as having different facets as represented by the subscales" (Baker and Siryk, 1989, p. 34). Hence, considerable evidence from numerous studies attests to the SACQ's reliability and validity across institutions and academic years. Moreover, the four subscales have been found to "relate to a statistically significant degree in expected directions to independent real-life behaviors that may be regarded as especially relevant to particular subscales" (e.g., correlation of high Academic Adjustment with subsequent election to Phi Beta Kappa) (Baker and Siryk, 1989, p. 49).

A distinct parallel exists between the SACQ's academic and social adjustment subscales and the intellectual and social integration (involvement) stressed in Tinto's (1987) theory of institutional departure. Academic discouragement and, to an even greater degree, "patterns of incongruence and isolation. . .appear to be central to the process of individual departure" (Tinto, 1987, p. 127). If, indeed, failure to become intellectually and/or socially integrated into the campus community leads to the decision to depart, and the SACQ successfully measures adjustment in those areas, the instrument should prove capable of predicting student withdrawal. And, just as the SACQ is based on self responses, Tinto (1987) also "takes seriously the ethno-methodological proposition that what one thinks is real" (p. 127). Inherent in his model is "the implied notion that departure hinges upon the individual's perception of his/her experiences within an institution of higher education" (p. 127).

Despite their obvious correspondence, the SACQ and Tinto's theory appear to have been developed independently and concurrently. On the other hand, both can trace their origins to the earlier research of such scholars as Clark and Trow

(1966) whose student subculture typologies were based on the variables involvement with ideas and identification with their college.

Methodology

During the Fall 1989 and Fall 1990 semesters, the University of Hartford administered the Student Adaptation to College Questionnaire to its incoming freshmen and transfer students within six to eight weeks of the start of classes. With full cooperation of the deans, this instrument was initially distributed through introductory-level courses in each of the University's eight constituent colleges (art, arts and sciences, basic studies, business, education, engineering, music, and technology). To increase the probability of securing returns from all new freshmen and transfer students, those who did not respond were contacted again through their residence hall or by mail. Nine hundred fifty-two new freshmen and transfer students returned usable SACQ forms in 1989 and a slightly larger number -- 1,026 -- did so in 1990. In both cases the percentage of respondents at this private, comprehensive university was between 62% and 70%.

Incoming students for 1989 completed the SACQ during late October and early November; after scores of this group had been analyzed and the means and standard deviations for each adjustment item established, a sample of students was invited to participate in follow-up interviews with a college academic advisor or the Director of Counseling. These unstructured interviews with high-risk (low adjustment) as well as low-risk (high adjustment) students occurred mid-way through the Spring 1990 semester. Based on results of this initial University-wide administration, new freshmen and transfer students in Fall 1990 completed the SACQ three to four weeks earlier (by October 15). Consequently, potentially high-risk students were identified and contacted for interviews prior to the end of that Fall semester.

Census date enrollment information for Spring 1990, Fall 1990, and Spring 1991 was used to determine the names of SACQ respondents no longer attending the University. After verification of their withdrawal or dismissal, these students were considered to be non-persisters. Of the 952 students in the 1989 cohort, 42 had withdrawn by Spring 1990; an additional 175 left by Fall 1990, and 47 more withdrew by Spring 1991, yielding a total of 264 non-persisters or 28% of the original sample (Table 1). Seventy-eight (7.6%) of the 1,026 respondents from Fall 1990 had withdrawn by the Spring of 1991 (Table 2).

Given its ability to statistically distinguish between two or more groups, discriminant analysis was used to test the SACQ's power in predicting student persistence. The data were analyzed separately for each semester and for each of the two years with the 67 SACQ items serving as discriminating variables -- potential predictors of membership in the persister or non-persister groups. (Separate analyses were undertaken because a highly-publicized new financial aid program had attracted a greater number of inner-city high school graduates to the 1990 freshman class, potentially altering adjustment patterns.)

Since the University of Hartford enrolls students from widely divergent backgrounds and interests, cluster analysis was also employed to identify the distinct student subcultures which characterize the campus. These clusters were primarily determined by students' responses to the 67 SACQ items and their first semester grade point average. As expected, non-persisters were distributed unequally among the resulting clusters or subcultures. Hypothesizing that persistence might be more powerfully predicted within several of the clusters, discriminant analysis was then used to distinguish between persisters and non-persisters in each cluster. Again, the Fall 1989 and Fall 1990 cohorts were treated in separate analyses.

STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE

Respondents Retained and Withdrawn, 1989 Administration

Semester	Students					
	Retained		Withdrawn		Total	
	#	%	#	%	#	%
Spring 1990	910	95%	42	5%	952	100%
Fall 1990	735	77%	217	23%	952	100%
Spring 1991	688	72%	264	28%	952	100%

Table 1.

STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE

Respondents Retained and Withdrawn, 1990 Administration

Semester	Students					
	Retained		Withdrawn		Total	
	#	%	#	%	#	%
Spring 1991	948	92%	78	8%	1026	100%

Table 2.

Results

Discriminant analysis of the Fall 1989 respondents who remained or withdrew after only one semester in college yielded a function of 31 variables that was moderately correlated with group membership (canonical correlation=.38) and that correctly classified 85% of the cases as persisters or non-persisters. Of the variables entering the function, those items which most strongly differentiated the two groups included: "I am pleased about attending the University of Hartford," "I have given considerable thought to stopping out," "I would rather be home than here," "I am satisfied with my courses for this semester," "I have some good friends at this college," "I have not been functioning well during exams," and "I expect to stay for a bachelor's degree."

When discriminant analysis was used to derive similar functions distinguishing persisters from non-persisters after the Spring 1990 and Fall 1990 semesters, the canonical correlations remained moderate, but classification accuracy dropped to 71% and 70% respectively.

With the Fall 1990 cohort, discriminant analysis among persisters and non-persisters after the first semester produced a function of 30 variables and a moderate canonical correlation (.35). The classification procedure correctly associated 79% of the cases with the appropriate group (persisters or non-persisters). Among the items which proved most powerful in determining group membership were: "I have given thought to transferring," "I am pleased about my decision to go to college," "I am very involved with social activities," "Being on my own, taking responsibility has not been easy," "I would rather be home than here," "I have enough social skills to get along well," and "I have given considerable thought to stopping out."

Prior research (1983) indicates that the University of Hartford, like most campuses (Clark and Trow, 1966), is not a uniform culture but, rather,

comprises heterogeneous elements. Consequently, cluster analysis (based on SACQ scores and grade point average as an additional measure of academic integration) was used to provide a deeper understanding of currently existing subcultures. As Clark and Trow (1966) observed, some students pursue goals other than the diploma as the aim of higher education. For instance, Clark and Trow's classic typology defines the collegiate and nonconformist subcultures which seek "fun" and "identity, " respectively. Given the relationship between student goals and persistence (Stark, Shaw, and Lowther, 1989 ; Tinto, 1987), examination of retention and departure within such subcultures proves enlightening. The cluster analysis defined five distinct groups among both the 1989 and 1990 SACQ respondents. Of the 952 individuals in the 1989 cohort, 284 (29.8%) had a high grade point average as well as high average scores (evidence of low risk of departure) on all 12 SACQ item clusters (Academic Motivation, Academic Application, Academic Performance, Academic Environment, General Social, Other People, Nostalgia, Social Environment, Psychological, Physical, General Attachment, and University of Hartford Attachment). A second group of 73 students (7.7%) proved low on all dimensions and, therefore, at high risk of withdrawal from college. Between these two extremes (ordered from lowest to highest risk) were: (1) 312 students (32.8%) manifesting high attachment to the University and average GPA; (2) 211 students (22.2%) with low attachment to the University and high GPA; and (3) 72 students (7.6%) having low attachment to the University and average GPA.

The 1,026 SACQ respondents from Fall 1990 emerged in quite similar although not identical clusters. From lowest to highest risk, these groupings comprised: (1) 421 students (41%) with high adjustment on all measures; (2) 128 students (12.5%) having high attachment to the University and low GPA; (3) 318 students (31%) with average attachment and average GPA; (4) 123 students (12%) with low

attachment and high GPA; and (5) 36 high-risk individuals (3.5%) having low adjustment across all dimensions. As Tables 3 and 4 clearly reveal, the percent of cluster members retained greatly decreases as risk (measured by attachment scores and GPA) increases. Likewise, the percent of cluster members withdrawing increases significantly with risk as indicated by the 21.9% and 30.6% withdrawal rates after one semester for the 1989 and 1990 respondents in the lowest adjustment groups.

The increased homogeneity (or decreased variance) of each of the clusters coupled with the correlation between cluster membership and persistence suggests that the SACQ may prove a more powerful predictor within clusters than with the universe of respondents. Discriminant analysis showed this, indeed, to be the case. For each of the five 1989 clusters (arranged from low to high risk), the percentage of members correctly classified as having remained or withdrawn after one semester was striking: 99.3%, 93.6%, 94.8%, 100%, and 100% (Table 5). The classification accuracy within the Fall 1990 clusters was almost equally remarkable: 85.9%, 99.2%, 78.3%, 96.8%, and 100%. As expected with unique subcultures, the resulting discriminant functions differed across groups, indicating dissimilar bases for persistence or withdrawal. For example, the most powerful discriminating variables within the highest-adjustment (lowest-risk) cluster in 1989 included: "I have given much thought to transferring," "I have given thought to asking for help from the Psychological/Counseling Services Center," "I have put on/lost too much weight," "I am satisfied with my academic situation," "I have several close social ties at college," and "I am quite satisfied with my social life at college." On the other hand, the most important items distinguishing between persistence and non-persistence in the lowest-adjustment (highest-risk) cluster were: "I am satisfied with my courses this semester," "I feel very different from other students," "I have not been functioning well during exams," "I haven't had much motivation for studying

STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE

Cluster Membership of 1989 Freshmen Retained and Withdrawn by Spring 1990

	Retained	Withdrawn	Total
Cluster Group			
(1) Lo Attach/Hi GPA	204 96.7%	7 3.3%	211 100.0%
(2) Lo Attach/Lo GPA	57 78.1%	16 21.9%	73 100.0%
(3) Hi Attach/Av GPA	305 97.8%	7 2.2%	312 100.0%
(4) Hi Attach/Hi GPA	280 98.6%	4 1.4%	284 100.0%
(5) Lo Attach/Av GPA	64 88.9%	8 11.1%	72 100.0%
Total	910 95.6%	42 4.4%	952 100.0%

Table 3.

STUDENT ADAPTATION TO COLLEGE QUESTIONNAIRE

Cluster Membership of 1990 Freshmen Retained and Withdrawn by Spring 1991

	Retained	Withdrawn	Total
Cluster Group			
(1) Av Attach/Av GPA	290 91.2%	28 8.8%	318 100.0%
(2) Hi Attach/Hi GPA	409 97.1%	12 2.9%	421 100.0%
(3) Lo Attach/Hi GPA	103 83.7%	20 16.3%	123 100.0%
(4) Lo Attach/Lo GPA	25 69.4%	11 30.6%	36 100.0%
(5) Hi Attach/Lo GPA	121 94.5%	7 5.5%	128 100.0%
Total	948 92.4%	78 7.6%	1026 100.0%

Table 4.

SACQDAP.WK1

UNIVERSITY OF HARTFORD
DISCRIMINANT ANALYSIS OF PERSISTENCE WITHIN CLUSTERS

Classification Results

1989					1990				
CLUSTER	CASES	CLASSIFICATION ACCURACY			CLUSTER	CASES	CLASSIFICATION ACCURACY		
		RETAINED	WITHDRAWN	OVERALL			RETAINED	WITHDRAWN	OVERALL
Hi Att/Hi Gpa	284	99.3%	100%	99.3%	Hi Att/Hi Gpa	421	85.8%	91.7%	86.0%
Hi Att/Av Gpa	312	94.1%	71.4%	93.6%	Hi Att/Lo Gpa	128	99.2%	100%	99.2%
Lo Att/Hi Gpa	211	94.6%	100%	94.8%	Av Att/Av Gpa	318	78.6%	75.0%	78.3%
Lo Att/Av Gpa	72	100%	100%	100%	Lo Att/Hi Gpa	123	98.1%	90.0%	96.8%
Lo Att/Lo Gpa	73	100%	100%	100%	Lo Att/Lo Gpa	36	100%	100%	100%

Table 5.

lately," "I have been feeling in good health lately," and "I would rather be home than here."

Discussion

Evidence from this study suggests that the Student Adaptation to College Questionnaire is not an alluring siren song which raises hopes only to dash them upon the rocks of reality. In fact, the results can effectively alert faculty and counselors as to which new students are most likely to depart from a particular institution. With overall discriminant functions correctly classifying 79% to 85% of all respondents as persisters or non-persisters after one semester, the SACQ significantly increases the 50% classification accuracy (for two groups) which occurs by chance. As the marketers have claimed, the SACQ does appear to serve as an early warning system, providing, in Tinto's words, "signals of the likelihood of potential problems" (1987, p. 201).

However, given the dramatic decline in classification accuracy of the discriminant functions obtained after two and three semesters, the present research also indicates that the SACQ is most effective in identifying early college departures -- students who leave after their first semester. This finding is entirely consistent with the authors' assertion that the variables measured are not expected to remain stable over time but, rather, are dynamic, varying with changes in the environment (Baker and Siryk, 1989). Reflecting some differences in the composition of the two entering classes, the overall discriminant functions for the 1989 and 1990 cohorts contained ten common elements (one-third of each function) although in different order. Consonant with Tinto's theory, Academic Adjustment and Social Adjustment measures predominated in both functions; the top two items in each represented Attachment and were followed by a Social Adjustment measure. However, an Academic Adjustment variable ("Satisfied with courses") entered the discriminant function

on the fourth step for the 1989 cohort while a Personal-Emotional Adjustment item ("Taking responsibility has not been easy") did so for the 1990 group.

The SACQ's potency in predicting persistence increased markedly (in several cases to 99% and 100%) when departure was considered within the five distinct student subcultures. Although this finding may have resulted from a relatively small number of non-persisters coupled with the reduced variance within each cluster, it is noteworthy and merits further investigation.

Indeed, the SACQ's apparent ability to identify various clusters or subcultures which characterize a campus is one of the most promising and exciting outcomes of this study. Student satisfaction and adjustment (and, by extension, persistence) appear strongly related to cluster membership (Santonicola, 1991). This finding coincides with Tinto's (1987) observation that student departure is not a unidimensional phenomenon but one that can take many different forms. In the present context, Fall 1989 students in the highest-adjustment (lowest-risk) group who have withdrawn from the University were likely to cite health-related problems or academic dissatisfaction as their reasons for leaving. In contrast, students in the two lowest-adjustment (and highest-risk) clusters tended to leave as a result of "feeling alone or isolated" and/or emotional problems (Santonicola, 1991). These patterns are corroborated by the discriminant functions for the three clusters. The first includes such items as "Have put on/lost too much weight" and "Satisfied with academic situation" while functions for the latter two groups comprise "Feel different from others," "Fit in as part of the college environment," and "Lonesome for home."

As with any discriminant analysis, the ultimate aim is to derive a function that can be applied to new freshmen and transfer students before the end of the first semester when those at highest risk may leave. Tinto's model of institutional departure not only "specifies both the conditions which foster

involvement and the social mechanisms through which involvement occurs," but also advances "ways in which diverse forms of social and intellectual involvement may be generated on campus for different types of students" (Tinto, 1987, p. 128). Similarly, SACQ items entering the discriminant function offer an adjustment profile for a particular group of students and, thereby, insights as to recommended intervention strategies. This increased awareness of students' adjustment needs can shape transition programs which focus on academic and study skills, library research skills, social skills, and/or counseling. A counselor or faculty advisor can talk with students found to be at risk of departure, using the instrument itself as a basis for productive discussion. Through such active intervention, faculty and staff can point students toward measures which promote greater integration or involvement in the institution and, ultimately, more successful adjustment.

Anecdotal evidence following dialogues with high-risk students at the University of Hartford provides some substantiation for a link between intervention, heightened adjustment, and increased retention. Faculty and counselors have helped disillusioned freshmen connect with specific interest groups (e.g., the student newspaper, fraternities, and service clubs), noting a subsequent improvement in such students' adjustment and attachment to the institution. However, this area demands further empirical research on other campuses and across institutional types.

By successfully identifying students most at risk of departure together with their area(s) of low adjustment (academic, social, personal-emotional, or attachment), the SACQ not only forms part of the early warning system advocated by Tinto (1987) but also becomes part of the retention solution. This instrument effectively operationalizes his theory, furthering students' integration into college intellectual and social life and -- more importantly -- enhancing their higher education experience.

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